

With Dr. Thomson's Compliments.

Annual Reports

❖ 1896. ❖

OF

The Medical Officer of Health

FOR THE

BOROUGH OF STRATFORD-ON-AVON,

THE

RURAL DISTRICT of STRATFORD-on-AVON,

AND THE

RURAL DISTRICT OF MARSTON SICCA.

HERALD PRINTING WORKS, STRATFORD-ON-AVON.

—
1897.



✦ 1896. ✦

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

BOROUGH OF STRATFORD-ON-AVON.

PAYTON STREET,

STRATFORD-ON-AVON,

JANUARY, 1897.

ANNUAL REPORT

OF

THE MEDICAL OFFICER OF HEALTH

FOR THE

BOROUGH OF STRATFORD-ON-AVON.

TO THE MAYOR, ALDERMEN, AND COUNCILLORS OF THE
BOROUGH OF STRATFORD-ON-AVON.

MR. MAYOR AND GENTLEMEN,

I HAVE the honour to present my Report on the Health of the Borough for the year ending December 31st, 1896.

POPULATION. As five years have elapsed since the last census enumeration I have made an estimate of the present population, which is probably nearly correct, by assuming that the slow rate of increase of population which occurred in the decade 1881—1891 has continued since 1891. An estimate based on this assumption makes the present population to be 8,460.

BIRTH-RATE. Two hundred and thirteen births were registered in the year (male 120, female 93), and the Birth-rate is 25·1 per 1,000 of the population.

DEATH-RATE. One hundred and sixty-three deaths took place in the year (male 78, female 85), and of these seventeen were deaths of persons not belonging to the borough. The death-rate, when corrected, is 17·2 per 1,000 of the population.

A reference to table A will show what proportion of deaths occurred in the public institutions situated in Stratford-on-Avon.

INFANTILE DEATH-RATE. Thirty-six deaths were those of children under one year of age, and the infantile death-rate is 169 per 1,000 births registered, or nearly 17 per cent. This rate is unusually high, and the prevalence of measles and whooping-cough has been an important factor in its production.

ZYMOTIC DEATH-RATE. Zymotic disease (smallpox, measles, whooping-cough, scarlet fever, diphtheria [and membranous croup], fever and diarrhoea) is accountable for twenty-one deaths, the numbers from each disease being given in table A.

The zymotic death-rate is 2·4 per 1,000.

RESPIRATORY DISEASES DEATH-RATE. Excluding phthisis, the rate from this disease is 2·6 per 1,000.

PHTHISIS DEATH-RATE. 1·5 per 1,000.

CANCER DEATH-RATE. 0·7 per 1,000.

Whether phthisis and cancer are actually on the increase to a marked extent, or whether their alleged increase is mainly due to more precise diagnosis, is a matter of much interest, and for this reason an exact annual estimate seems desirable. The mere fact that with the advance of sanitation more persons live to the age when these diseases are most liable to be incurred than was formerly the case brings it about that these two diseases, like all diseases of adult life, have theoretically a possibility of increase.

MORTALITY AND SICKNESS.

SMALLPOX. No case of this has been notified in the year. A reference to the report to the Rural District Council, which is printed with this report, will show that on one occasion ample opportunity existed to contract the infection of smallpox in the town.

SCARLET FEVER. As is shown in Table B there were thirty-seven cases of scarlet fever, all of which were promptly removed for isolation purposes. One death from the disease occurred, the patient coming from Shottery. Although it is a matter of congratulation that the disease was almost invariably present in a mild form yet this very condition of affairs is responsible for the difficulty experienced in keeping the complaint from becoming widely prevalent. Some cases of the disease which were isolated were only demonstrated to be actually fever cases by repeated inspection and by the exercise of much vigilance on the part of the medical attendant

(A) TABLE OF DEATHS during the year 1896, in the STRATFORD-UPON-AVON URBAN DISTRICT, classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.							MORTALITY FROM SURJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																							
	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	FEVER.																			Total.				
								Smallpox	Scarlatina	Diphtheria	Membranous Group	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas	Measles	Whooping Cough	Diarrhoea and Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, & Pleurisy	Heart Disease	Influenza		Injuries	All other Diseases		
The Borough	125 36 11	7 5 29 37					Under 5	1 1	3 1				4 3 1	1									1 12	2			22	47			
							5 upwds							1														44	78		
The Workhouse	24					7 17	Under 5																								
							5 upwds																6 4	5				2 12	24		
The Hospital	10	2 1 5 2					Under 5																					1 1	2		
							5 upwds																					1 5	8		
The Nursing Home	2	1 1					Under 5																					1	1		
							5 upwds																1					1			
The Joint (Infectious) Hospital...	2	2					Under 5		1 1																					2	
							5 upwds																								
Totals	163 36 14 10 11 38 54						Under 5	1 1	1 1			4 3 1											1 12	2			1 24	50			
							5 upwds					1											15 9				3 6 1	113			
Deaths in the District of persons not belonging thereto.	17	1 2 7 7					Under 5																				1	1			
							5 upwds																					7	16		

(B) TABLE OF POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health during the year 1896, in the STRATFORD-ON-AVON URBAN DISTRICT; classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these statistics; Public In- stitutions being shown as separate localities.	POPULATION AT AT ALL AGES.		Regis- tered Births	Aged under or over 5	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOW- LEDGE OF THE MEDICAL OFFICER OF HEALTH														NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREAT- MENT IN ISOLATION HOSPITALS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Census 1891	Esti- mated to middle of 1896			FEVERS.														FEVERS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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The Brough ...	8318	8460	213	Under 5 5 upwds	4 30	3 18	1 1								1 7		4 30	2 8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

and myself. And as it is futile to suppose that all parents call in medical advice for vague skin rashes on their children, unattended by marked constitutional symptoms, we are very much at the mercy of the complaint, and can only hope to limit its scope without being able to completely suppress it. No doubt, however, the general public will pay more and more attention to the appearance of this disease among children as time goes on, and from the education of the public in this respect the improvement in results obtained is to be expected. In only one instance in the year I found that wilful exposure of a patient with the disease had occurred. This was the case of a youth who, after being informed of the probable nature of his complaint, was going at large on the day on which the annual "mop" is held.

The cases which were notified are as follows. An inspection of the table will show that it was the exception for more than one member of the family to suffer. That this is so is, I think, due to the fact that if there is reason to believe a patient has the disease he is despatched to hospital forthwith. Such promptitude of action involves the risk of allowing little time to verify the diagnosis, but as a matter of fact there should be no danger of introducing a non-infectious case to the proximity of infectious cases since it is easy to place a doubtful case in a ward by itself.

MONTH.	NO. OF CASES.	NO. OF FAMILIES	RESIDENCE.
January.	3	3	Great William-street, Mulberry-street, West street
March.	4	3	Waterside, Mulberry- street, Wood-street
April.	1	1	Great William-street
May.	1	1	Waterside
July.	3	2	Workhouse, Waterside
August.	6	4	College-lane, West- street, Old Town
October.	2	2	Workhouse, Great William-street
November.	9	8	Great William-street, Shottery-road, Shot- tery, Arden - street, Bull-street, Waterside, Clopton
December.	8	6	Workhouse, Shottery, Bull-street, Birming- ham-road, Old Town
	37	30	

In all cases, after the removal of the patients to hospital, disinfection of the premises by sulphur fumigation was carried out, and the bedding, &c. removed from the house and put through the steam disinfector.

DIPHTHERIA (and Membranous Croup). Twenty-three cases of these were notified, and ten removed to hospital. One case died in hospital, and six cases nursed at home died.

In January four cases occurred in Shottery. In February there were notified, one case from Bridge-street, one from Bull-street, one from Evesham-place, and one from Evesham-road. In March a case was notified in Bull-street and one in Albany-place. In April a case occurred in Union-street and another in Albany-place. In May there was a case in Union-street due to a previous case on the same premises, and also a case in Evesham-road. In June four cases were notified, Guild-street, Clopton-lane, Wellesbourne-grove, and Mansell-street being the position of premises occupied. In July Mansell-street and Waterside afforded three cases. In August a case was notified in Great William-street. In December a death was registered from membranous croup in Wellesbourne-grove.

Less than one half of the notified cases were isolated in hospital, as it is found that removal is not readily agreed to by those in care of the cases, and as compulsory removal is of doubtful expediency it is only had recourse to, as a rule, when the surroundings are of such a nature that proper care of the patient and safety of others about him is out of the question. I have little doubt that in time the value of treatment in hospital will be better recognised and made use of.

Treatment by injections of Antitoxine was performed in one case in hospital with satisfactory results. It was used in one case treated at home as a last resource, and this case died.

When the disease became prevalent in Shottery I caused handbills to be circulated there enjoining attention to all possible sources of infection, and directed all children from infected families to discontinue school attendance. The same precautions as regards disinfection were taken just as is done in scarlet fever cases. The cases in Albany-place evidently arose from drain obstruction. One case which occurred seemed probably due to offensive emanations from a road gully just outside the door of the house. All premises occupied were thoroughly inspected for sanitary defects, and when the water supply was from a well this was analysed and closed if unsatisfactory in quality.

MEMBRANOUS CROUP. I have included the two cases notified under this heading with those of diphtheria.

ENTERIC FEVER (Typhoid). A case of this was notified in premises at the Meer-street end of Rother-street. The house well was impure and was closed, and town water laid on. An order was also made for the cleansing and disinfecting of the premises, a process decidedly required. The case ended fatally.

PUERPERAL FEVER. In Shottery a woman died of this disease, and the infection was probably conveyed to her by a person who had been in contact with scarlet fever.

ERYSIPELAS. Ten cases were notified, and one death occurred.

MEASLES. This zymotic became very prevalent at the end of March, and necessitated the closing of the public schools. The disease lingered on through the summer, and was accountable for five deaths.

WHOOPING-COUGH was somewhat prevalent in the year, and caused three deaths.

INFLUENZA. I do not find any deaths registered as due to this disease.

CANCER. Six deaths are registered as due to cancer.

SCHOOLS CLOSED.

April.	National	Schools	(Infant	Department).
„	Board	„	„	„
„	S. Gregory's	„		
„	Shottery	„		
„	Board	„		

In all of the above cases the schools were closed on account of measles being epidemic.

Measles being an infectious disease, which is not notifiable in the Borough, there is no means of knowing of its existence until it has gained a foothold and become epidemic. It being non-notifiable affords an opportunity for the spread of scarlet fever, as the one complaint may readily, by inexperienced persons, be mistaken for the other. Apart from including measles as a notifiable disease it is possible that co-operation of school authorities would afford the best means of controlling an outbreak, and might occasionally prevent recourse to the extreme measure of school-closing.

HOSPITAL ISOLATION.

The report on the Joint Infectious Hospitals, issued with this, and my remarks made under the headings of "Scarlet Fever" and "Measles," contain any remarks I have to make on this subject.

SEWERAGE.

Attention has been given of late to the sewer ventilating shafts, and where necessary these have been lengthened to afford exits for gas at higher points. Care was also taken throughout the summer drought to renew from time to time the water standing in road gullies, and this would appear to be a matter worthy of routine attention in summer.

It would be an advantage if all work done in the repair or alteration of existing house-drains were under the supervision of your officials, as is the case with new drains made. If this were made compulsory the advantage to the person at whose cost the work was done would be that he would have the benefit of expert opinion, and would be guaranteed a workman-like job.

WATER SUPPLY.

In the past year, I am informed by Mr. Dixon, your surveyor, that 23 new connections, embracing 27 separate supplies, have been made with the mains, making a total of 572 connections and of 1,075 separate supplies to date. Since it is now found that even a drought such as prevailed in 1896 does not overtax the capabilities of the present storage of water there is every reason why a universal service of water from the mains should be introduced, and the use of well water for domestic purposes be totally abandoned. A well, however pure, is practically always subject to the risk of pollution in a town, and such pollution may not render the water evil-smelling or discoloured, but may only make its presence known by producing sickness. When to this is added the fact that very few wells are so constructed so as to prevent the soakage of the soil a few feet below the surface entering them, and when it is taken into consideration what the surface of the soil in an ancient town is composed of, it will readily appear that even when well water is not sufficiently impure to be condemned by the analyst it is not likely to be "pure" in the sense that an article of human consumption should be.

From time to time in the year analyses of the public water supply of the town have been made, and no deterioration of the quality has been found on any occasion.

HOUSING OF THE WORKING CLASSES,

During the year I have not found it necessary to deal with any property under the provisions of the Housing of the Working Classes Act.

DAIRIES, COWSHEDS, AND MILKSHOPS.

These have received due attention, and there has been no fault to find other than that the accommodation generally provided for cattle is rather primitive. There is no reason to think that there is any disadvantage from this, other than that inferior stabling allows more possibility of foreign matter getting into the milk. To ensure perfect cleanliness of a milk supply cows should receive the same housing and attention that horses in a well-appointed stable do.

BAKESHOPS.

Inspection of these has been made throughout the year, and any defects dealt with. All were found to be up to a fair standard.

CANAL BOATS.

Vide report of Sanitary Inspector.

BATHS AND WASH-HOUSES.

During the year the question of providing public baths and wash-houses received consideration.

SLAUGHTER-HOUSES.

As I have mentioned in previous reports, the existence of private slaughter-houses in the more thickly-populated part of the town is unsatisfactory, though every care is taken to prevent avoidable nuisance.

VACCINATION.

As is shown by an appended return of the Vaccination Officer, vaccination is effectually carried out in the Borough.

I am, Mr. Mayor and Gentlemen,

Your obedient servant,

ARTHUR THOMSON,

M.B., C.M., Ed. Univ., D.P.H. Cantab,

Fellow of the British Inst. Pub. Health.

VACCINATION.

THE BOROUGH OF STRATFORD-ON-AVON.

Births Registered, together with the number of such cases successfully Vaccinated or otherwise disposed of in the above District during the year ending June 30th, 1896.

No. of Births Registered during the year ending June 30, 1896.	Number of these cases successfully Vaccinated.	Insusceptible of Vaccination.	Died before Vaccination.	Cases under Postponement.	Removals to other Districts out of the Union.	No. of cases not to be found.	Number of cases remaining Unvaccinated at date of this return.
209	171	—	28	—	5	—	5

Summary of Sanitary Work done in the Inspector of Nuisances Department
during the year 1896 in the Borough of Stratford-on-Avon.

				Inspections and Observations made.	Formal Notices by Authority	Nuisances Abated after Notice.
Dwelling Houses and Schools.	Foul Conditions	..	..	18	13	18
	Structural Defects	..	..	16	11	16
	Overcrowding	..	..	2	2	2
	Unfit for Habitation [See M O H. Report	..	..	—	—	—
	Lodging Houses	..	..	19	—	—
	Dairies and Milkshops	..	..	27	—	—
	Cow Sheds	..	..	27	—	—
	Bakehouses [See M. O. H. Report	..	..	—	—	—
	Slaughter-houses	..	..	Regu- larly	—	—
House Drainage	Canal Boats	..	..	9	—	—
	Ashpits and Privies	..	..	26	16	23
	Deposits of Refuse and Manure	..	..	16	19	16
	Water Closets	..	..	19	17	19
	Defective Traps	..	..	18	16	17
	No Disconnection	..	..	21	17	21
	Other Faults	..	..	10	10	9
	Water Supply	..	..	16	16	16
	Pigsties	..	..	6	6	6
	Animals improperly kept	..	..	—	—	—
	Offensive Trades	..	..	—	—	—
	Smoke Nuisances	..	..	—	—	—
	Other Nuisances	..	..	7	7	7
	Totals	..	..	257	149	170
Seizures of unwholesome food, &c.				13		
Samples of water taken for Analysis				9		
" " condemned as unfit for use						
NOTE.—Where an inspection or notice embraces more than one defect, it may be enumerated separately as regards each such defect.						
PRECAUTIONS AGAINST INFECTIOUS DISEASE.						
Lots of Infected Bedding Stoved or De- stroyed .. [No Record kept						
Houses Disinfected after Infectious Disease				49		
Schools " " "				1		

STRATFORD-ON-AVON RURAL DISTRICT.

ANNUAL

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

RURAL DISTRICTS OF STRATFORD-ON-AVON.

STRATFORD-ON-AVON RURAL DISTRICT.

ANNUAL REPORT

OF

THE MEDICAL OFFICER OF HEALTH

Area (approximate) 58,000 acres. Population in 1891, 11,297.

PARISH.	POPULATION (IN 1891).	INHABITED HOUSES (IN 1891).
Alveston ...	954	206
Atherstone-on-Stour ...	115	23
Bearley ...	188	45
Beaudesert ...	141	33
Bickmarsh ...	130	22
Billesley ...	16	3
Binton ...	235	55
Charlecote ...	212	56
*Combroke ...	209	48
Compton Verney ...	86	14
Claverdon ...	550	128
Ettington ...	620	149
Fulbroke ...	59	16
Temple Grafton ...	388	97
Hampton Lucy ...	395	90
*Kineton ...	1021	234
Langley ...	142	37
*Loxley ...	261	63
Luddington ...	109	25
Milcote ...	50	8
Moreton Morrell ...	252	63
Newbold Pacey and Ashorne ...	338	81
Old Stratford and Drayton ...	165	111
Preston Bagot ...	176	38
*Snitterfield ...	790	200
Wellesbourne Hastings and Walton ...	672	160
Wellesbourne Mountford ...	673	170
Whitchurch ...	194	42
Wolverton ...	151	37
*Wootton Wawen ...	2005	468
Totals ...	11,297	2,722

Parishes marked * have public water supply from mains.

The figures given above vary slightly from those given in previous reports, this being due to the fact that a small portion of the parish of Wootton Wawen has recently been transferred to the Solihull Rural District.

POPULATION OF THE DISTRICT IN 1896. I estimate this as 10,992, making a decrease of 515 since the last census was taken.

BIRTH-RATE. The birth-rate for the year is 23·9, the number of births being 263 (male 126, female 137).

DEATH-RATE. The death-rate (corrected) is 14·1 per 1,000, the number of deaths being 156.

INFANTILE MORTALITY. There have been 30 deaths of children under one year of age, and the infantile mortality is 114 per 1,000 births registered.

THE ZYMOTIC DEATH-RATE. Zymotic disease has caused 10 deaths, making the rate 0·9 per 1,000. Reference to Table A will show the number of deaths from the several zymotic diseases.

(A) TABLE OF DEATHS during the year 1896, in the STRATFORD-UPON-AVON RURAL DISTRICT, classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.						MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																							
	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Smallpox	Scarlatina	Diphtheria	Membranous Croup	FEVERS.					Cholera	Erysipelas	Measles	Whooping Cough	Diarrhoea and Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, & Pleurisy	Heart Disease	Influenza	Injuries	All other Diseases	Total.	
												Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal														
Stratford-upon-Avon Registration Sub-District.	15	3 3	1 4	1 4	4	4	Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	4	6	
Wellesbourne Registration Sub-District.	77	12 6	4 6	24 25	...	...	Under 5 5 upwds	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	3	...	...	...	5	9
Wootton Waven Registration Sub-District.	47	15 4	1 3	11 13	...	...	Under 5 5 upwds	...	...	3	...	...	...	...	...	...	...	...	...	1	1	1	...	3	2	...	...	...	11	19
							Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	4	4	2	...	2	12	28
							Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
							Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	139	30 13	5 10	39 42	...	...	Under 5 5 upwds	2	...	3	...	...	...	...	...	...	...	...	1	2	1	...	5	5	...	...	27	43		
Deaths occurring outside the District of persons belonging thereto.	17	1	2 7	7	...	...	Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
							Under 5 5 upwds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	5	2	...	...	7	16	

(B) TABLE OF POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health during the year 1896, in the STRATFORD-UPON-AVON RURAL DISTRICT; classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these statistics; Public In- stitutions being shown as separate localities.	POPULATION AT AT ALL AGES.		NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOW- LEDGE OF THE MEDICAL OFFICER FROM THEIR HOMES IN THE FEVERS. SEVERAL LOCALITIES FOR TREAT- MENT IN ISOLATION HOSPITALS.													
	Census 1891	Esti- mated to middle of 1896	Regis- tered Births	Aged under or over 5	OF HEALTH.											
					Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup	Typhus	Euteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas	Smallpox
(a)	(b)	(c)	(d)													
Stratford-upon-Avon Registration Sub-District.	1379		41	Under 5 5 upwds	1	4										1
Wellesbourne Registration Sub-District.	5752		121	Under 5 5 upwds	11	49		6							2	11
Wootton Waven Registration Sub-District.	4353		101	Under 5 5 upwds	4	14							1		1	3
Totals ...	11484	10992	263	Under 5 5 upwds	1	15		2							1	14
					67	4							1		4	1
																50

TABLES A AND B.

SMALLPOX. In June a case of smallpox was notified in the parish of Luddington. The patient was a gentleman who had come to Luddington three days previously from the town of Reading. The initial rash of the disease developed immediately after his arrival in this district, and for the treatment of this he visited a local chemist, and was prescribed for. On the following day he paid a visit to Malvern, and on his return was seen by a medical man, and the nature of the disease discovered. He was sent at once to Bellevue Hospital, and prompt disinfection of the premises at Luddington was carried out. No further case occurred in the district, fortunately. The Medical Officers of Health for Malvern and Reading were notified of the facts of the matter. It is probable that this patient was in close contact with scores of persons while in the infectious stage of the disease, and the history of the case is interesting as demonstrating that it is possible for an educated intelligent person to go about spreading smallpox broadcast and be totally ignorant of his doing so.

SCARLET FEVER.

At the end of the year 1895 there was reason to hope that an outbreak of scarlet fever, which had occurred in Ettington, was successfully checked. This, however, was not the case, for the disease re-appeared early in 1896, and in the first three months of the year there were twelve cases. The schools were closed, disinfected, and thoroughly cleansed and whitewashed. New school-books were procured, and those in use destroyed. I made frequent visits to the village, and inspected all children suspected of having scarlet fever, and my efforts to quell the epidemic were seconded by the medical men who visit the village telegraphing their notifications instead of using the slower method of postal delivery. Their doing so allowed of children being removed within a few hours of their discovery. For the first six months of the year all cases were removed to hospital. The result of all these exertions seemed to be that the diffusion of the epidemic took months instead of weeks to occur, but was none the less universal in the village. From March until the end of the year the cases sent in from Ettington were as follows:—April, 4; May, 6; June, 5; July, 0; August, 2; September, 0; October, 3; November, 6; December, 0.

From the general mildness of the disease I have no doubt that occasionally cases were overlooked by parents, and I have reason to think that (when it became generally known that there was little to be feared from the epidemic, and that children readily recovered from it) much indifference prevailed as to whether infection was contracted.

DIPHTHERIA. In March a case was notified at Bearley, and the condition of the premises occupied would readily account for the presence of "filth" disease. In October a child at Wolverton, who was convalescing from measles, developed diphtheria and died. This could reasonably be ascribed to the fact that the construction of the middens on the premises was faulty, and likely to give rise to contamination of the air about the house. This defect has been remedied.

In December two cases occurred at Henley-in-Arden, both proving fatal. Both were the mothers of children suffering from scarlet fever, and the complaint was possibly due to infection from the children. I had no opportunity of much investigation into these cases, as both had terminated fatally at the time I heard of them.

MEMBRANOUS CROUP. Two children died of this disease in Ettington. In one case it was found that an old drain with pervious walls ran beneath the house, and that the premises were generally insanitary. Proceedings were taken to deal with the house under the Housing of the Working Classes Act. The other case was evidently predisposed to throat trouble through scarlet fever.

ENTERIC FEVER. None has been notified in the year.

MEASLES has been epidemic all through the year, necessitating the closing of numerous schools. One death, however, has been the result.

WHOOPING COUGH. One death has happened from this.

DIARRHŒA AND DYSENTERY. One death has been due to diarrhœa as a primary cause.

INFLUENZA. This zymotic is responsible from year to year for several deaths, and two have occurred from it in 1896.

CANCER. Five deaths are registered as owing to cancer.

SCHOOLS CLOSED.

In the course of the year the following schools were closed on account of infectious disease among the school children —

SCHOOL	DISEASE PREVALENT.
Snitterfield	Measles.
Wellesbourne	Measles.
Ettington	Scarlet Fever.
Tiddington	Measles.
Hampton Lucy	Measles.
Kineton	Measles.

ISOLATION OF INFECTIOUS DISEASE.

The experience of the past year in the removal of infectious cases from their homes to hospital goes to prove that if a patient is in a fit state for removal from his house it matters very little whether the hospital is one or ten miles from where he lives. In all serious cases, or when young children are removed, a nurse accompanies the ambulance carriage, and hot-water bottles and blankets are provided to prevent risk of chill to the patient. Considering that the removal of cases to hospital throughout the district has only recently been introduced it speaks well for the reputation that the hospital has already gained that practically no opposition to removal is met with. In connection with this I have to thank my medical colleagues throughout the district for advocating to their patients the benefits which isolation confers.

WATERWORKS.

In the course of the year the village of Ullenhall has had a public water supply introduced, and when this is in complete working order the advantage to the residents cannot fail to be appreciated, as the former supply from wells was inadequate, and not up to a fair standard of purity.

The public water supply recently introduced into Henley-in-Arden has almost entirely superseded already the dangerous well-water of the place, and there has been no typhoid fever notified from Henley in the past twelve months.

In Alveston and Tiddington a thorough investigation of the public supply from wells was carried out in the year under my supervision. Samples of water were taken throughout the two villages at distances apart of about 100 yards. As the subsoil is porous there was no object in taking samples from wells adjoining each other at a less distance than this. The result of the analyses of these showed that very few were up to a reasonable standard of purity, a result one might expect on account of the situation of the wells in general. As a result of this investigation it has been decided to obtain a public water supply by boring or otherwise. When this last is done it might be well to construct the works with the view of including Wellesbourne in the scheme, if at any time this latter place has to replace its present mode of supply by having resort to a general public supply.

SEWERAGE AND DRAINAGE.

During the year I made a special report on the drainage of Tiddington and Alveston to the effect that the present condition of affairs was unsatisfactory, mainly because the pollution of the well-water was due to it. In the report it was stated that by means of certain work being carried out the present drains might be gone on with with comparative safety to the public if a public water supply was introduced. The question as to whether the present drains would suffice to deal with the increase of sewage, which would follow the introduction of a public water supply, was also mentioned. To this report I have nothing to add.

In Ettington it is proposed in the coming year to replace the defective drainage system of the place by means of a main-drain running throughout the village, with side branches where necessary, to receive the house drainage and storm-water of the village, and convey it to a point whence it will be distributed by gravitation over land. The work is all to be executed with cement-jointed pipes of sufficient size to allow for storm-water, and the natural conformation of the land gives excellent fall to the drainage. When carried out the village will have a drainage system of an excellence rarely found in rural districts.

HOUSING OF THE WORKING CLASSES.

As mentioned under the heading of "Membranous Croup" a representation was made under this Act with respect to two adjoining cottages in Ettington. As this was done at the close of the year I am not yet able to report on the result of this action.

DAIRIES, COWSHEDS, AND MILKSHOPS.

Every care has been taken to guard against the spread of disease through the agency of these.

BAKESHOPS.

I have no report to make with special reference to these.

BYE-LAWS.

It is a matter of congratulation that these may soon be expected to come into operation.

VACCINATION.

As is shown by an appended return of the Vaccination Officer vaccination is well carried on in the district.

The following figures demonstrate so fully the efficacy of vaccination as to justify my appending them to this report. They are taken from "The Journal of State Medicine," January, 1897.

Attack-rate of smallpox in invaded houses per 100 persons.

	Under 10 years of age.			Over 10 years of age.			
	Vaccinated.		Unvaccinated.	Vaccinated.		Unvaccinated.	
Sheffield epidemic...	7·9	...	67·6	...	28·3	...	53·6
Warrington „ ...	4·4	...	54·5	...	29·9	...	57·6
Dewsbury „ ...	10·2	...	50·8	...	27·7	...	53·4
Leicester „ ...	2·5	...	35·3	...	22·2	...	47·6
Gloucester „ ...	8·8	...	46·3	...	32·2	...	50·0

The evidence of the comparative mortality of the two classes is most conclusive with regard to these five epidemics, the average mortality being :— Vaccinated, 4·4 per cent. ; unvaccinated, 27·5 per cent. In the Gloucester epidemic the ratio was as 10 to 40·9 in favour of those with vaccination marks. If a means of lessening the death-rate from phthisis to a similar extent could be found and were as safe in application as vaccination is it would probably find few opponents.

I am, Gentlemen,

Your obedient servant,

ARTHUR THOMSON, M.B.

VACCINATION.

THE STRATFORD-ON-AVON UNION.

Births Registered, together with the number of such cases successfully Vaccinated or otherwise disposed of in the above District during the year ending June 30th, 1896.

No. of Births Registered during the year ending June 30, 1896.	Number of these cases successfully Vaccinated.	Insusceptible of Vaccination.	Died before Vaccination.	Cases under Postponement.	Removals to other Districts out of the Union.	No. of cases not to be found.	Number of cases remaining Unvaccinated at date of this return.
488	372	—	49	1	9	—	57

Summary of Sanitary Work done in the Inspector of Nuisances Department
during the year 1896 in the District of the Rural District
Council of Stratford-on-Avon.

				Inspections and Observations made.	Formal Notices by Authority	Nuisances Abated after Notice.		
Dwelling Houses and Schools.	{	Foul Conditions	..	48	22	56		
		Structural Defects	..	83	56	87		
		Overcrowding	..	—	—	—		
		Unfit for Habitation [See M O.H. Report		—	—	—		
		Lodging Houses	..	14	—	—		
		Dairies and Milkshops	..	23	—	—		
		Cow Sheds	..	23	—	—		
		Bakehouses [See M O. H. Report		—	—	—		
		Slaughter-houses	..	Regu- larly	—	—		
		Canal Boats	..	14	—	—		
		Ashpits and Privies	..	133	108	127		
		Deposits of Refuse and Manure	..	7	11	7		
		Water Closets	..	7	7	8		
House Drainage	{	Defective Traps	..	37	36	40		
		No Disconnection	..	54	53	52		
		Other Faults	..	28	23	27		
		Water Supply	..	120	125	120		
		Pigsties	..	7	7	7		
		Animals improperly kept	..	—	—	—		
		Offensive Trades	..	—	—	—		
		Smoke Nuisances	..	—	—	—		
		Other Nuisances	..	39	39	33		
		Totals	..	657	487	564		
		Samples of water taken for Analysis ..				120		
		,, ,, condemned as unfit for use				106		
		NOTE.—Where an inspection or notice embraces more than one defect, it may be enumerated separately as regards each such defect.						
PRECAUTIONS AGAINST INFECTIOUS DISEASE.								
Lots of Infected Bedding Stoved or De- stroyed .. [No Record kept								
Houses Disinfected after Infectious Disease				87				
Schools ,, ,, ,,				2				

RURAL DISTRICT OF MARSTON SICCA.

ANNUAL
REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1896.

RURAL DISTRICT OF MARSTON SICCA.

ANNUAL REPORT

OF

THE MEDICAL OFFICER OF HEALTH.

Area (approximate) in statute acres 8,286.

Rateable value, £10,286.

Population, 1881, 1,808.

Population, 1891, 1,658.

Population, estimated to middle of 1896, 1,584.

MR. CHAIRMAN AND GENTLEMEN.

There have been 36 births in the year and 23 deaths, which gives a birth-rate of 22·7 per 1,000 of the population, and a death-rate of 14·5. Both rates are decidedly low. Three deaths occurred in children under one year of age, and the infantile death-rate is 83 per 1,000 births registered. An infantile death-rate below 100 per 1,000 is satisfactory. Two deaths occurred from infectious disease, one from whooping-cough, and one from diphtheria. The zymotic death-rate is 1·2 per 1,000.

INFECTIOUS DISEASE NOTIFIED IN THE YEAR.

Nine cases of scarlet fever occurred in the year, six being in Clifford Chambers, and three in Preston-on-Stour. Considering how prevalent the disease has been in the districts adjoining, Marston Sicca has until this year enjoyed an extraordinary immunity from the complaint, but as there have been, I am inclined to think, frequent mild unnotified cases of late it is not to be expected that such a condition of affairs will continue. Of the nine cases six were removed to hospital.

(A) TABLE OF DEATHS during the year 1896, in the MARSTON SICCA RURAL DISTRICT, classified according to DISEASES, AGES, and LOCALITIES.

		MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
		At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Smallpox	Scarlatina	Diphtheria	FEVERS.						Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas	Measles	Whooping Cough	Diarrhoea and Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, & Pleurisy	Heart Disease	Influenza	Injuries	All other Diseases	Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Rural District of Marston Sicca.	23	3	1	2		9	8	Under 5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

(B) TABLE OF POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health during the year 1896, in the MARSTON SICCA RURAL DISTRICT ; classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these statistics.	POPULATION AT AT ALL AGES.			NEW CASES OF SICKNESS IN EACH NUMBER OF SUCH CASES REMOVED LOCALITY, COMING TO THE KNOW- FROM THEIR HOMES IN THE LEDGE OF THE MEDICAL OFFICER SEVERAL LOCALITIES FOR TREAT- MENT IN ISOLATION HOSPITALS.													
	Census 1891	Esti- mated to middle of 1896	Regis- tered Births	Aged under or over 5	OF HEALTH.												
					FEVERS.							FEVERS.					
					Smallpox.	Scarlatina.	Diphtheria.	Membranous Group	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas	Smallpox	Scarlatina
Clifford Chambers		(b)	(c)	(d)													
					Under 5	6	2									6	
Preston-on-Stour					5 upwds												
					Under 5	3											
					5 upwds												
					Under 5												
					5 upwds												
					Under 5												
Totals ...					Under 5	9	2									6	
					5 upwds												

Diphtheria was notified on two occasions, the patients being both from the same house, and one possibly causing the other, although a month intervened between them. The first patient had just left hospital, where she had been under treatment for scarlet fever, and it was suggested at the time that infection might have been contracted there. On inquiry into the facts of the case I found that she had been a child subject to throat trouble before coming to hospital, and that up to the time of her discharge from hospital her throat had never assumed a normal appearance. And since there was no diphtheria under treatment at the hospital while she was there, and since a number of children occupying the same ward she was in did not show any evidence that a mixed infection of scarlet fever and diphtheria had been introduced into the ward, I do not think that there was any evidence to implicate the hospital as a source of infection, the more especially as the surroundings of her home might cause the disease in a child susceptible as she evidently was. These cases of scarlet fever and diphtheria comprise all the infectious disease notified in the district during the year.

WATER SUPPLY.

Much attention has been given in 1896 to the question of the water supply of Marston Sicca, a village in which the present condition is that the domestic water supply is obtained from stagnant water-holes receiving surface drainage. It is a matter that has been under consideration for many years, and one that must sooner or later find a remedy. In the past year, by the generosity of Commander Carrow, R.N., who undertook to pay the expense of investigation, trial-holes were sunk on Rumer Hill to determine whether it was correct to assume that the subsoil constituted a natural basin of porous water-bearing sand and gravel which might be utilised as a source of water supply for the village. The report of the engineer superintending this work, J. E. Willcox, Esq., A.M.I.C.E., was disappointing, inasmuch as it was found that the summit of the hill contained no such natural reservoir in the subsoil, and that the gravel was only present as a deposit of slight thickness.

Rumer Hill may, as a result, be considered to be abandoned as a proposed source, and it is to be hoped that some scheme will be found which will promise better results, as the matter is one which cannot remain in abeyance. At the time of my writing steps are being taken to ascertain if the village can come to an arrangement by which the Evesham village water scheme will extend to Long Marston.

VACCINATION.

As Public Vaccinator of part of your district I called the attention of the Guardians recently to the fact that in my opinion there was considerable dissatisfaction caused by the requirements of the Act not being made compulsory. For instance, when a cottager has brought a child one or two miles to the vaccination station and learns that the parents of a child living close to the station have not attended for vaccination there is apt to be discontent.

HOUSING OF THE WORKING CLASSES.

I have not certified with respect to any property under the provisions of the Housing of the Working Classes Act. In March last your Sanitary Inspector, Mr. Brook, issued notices with reference to a block of cottages at Dorsington in a defective state under Section 94 of the P. H. Act, 1875, and proceedings were instituted under Section 95 of the same Act. On the agent of the property stating in court that it was not desired to keep the premises in repair or to further use them for human occupation he was permitted to close them, and no requisition was made for work to be done. They are now gradually falling into ruin. If a similar line of action were carried out in such a village as Welford, where much of the property is old and not up to a good standard, the results obtained might be to partially depopulate the village.

In conclusion, Mr. Chairman and Gentlemen, I have to thank you for re-appointing me as your Medical Officer of Health and for the courtesy and consideration I have received at your hands hitherto.

I am,

Your obedient servant,

ARTHUR THOMSON,

Joint Infectious Hospitals

OF THE

BOROUGH OF STRATFORD-UPON-AVON

AND THE

RURAL DISTRICTS OF STRATFORD-ON-AVON

AND

MARSTON SICCA.

Matron :

Medical Superintendent :

MISS ELLIS.

ARTHUR THOMSON, M.B.

R E P O R T

OF

THE MEDICAL SUPERINTENDENT.

TO THE CHAIRMAN AND MEMBERS OF THE JOINT
HOSPITALS COMMITTEE

GENTLEMEN,

The following Table is a summary of the infectious disease treated at the Stratford-on-Avon Joint Hospital and Bellevue (Smallpox) Hospital during 1896.

	THE BOROUGH	RURAL DISTRICT STRATFORD-ON-AVON	RURAL DISTRICT MARSTON SICCA	OUTSIDE DISTRICTS	TOTAL
No of cases of Smallpox ...		1			1
„ „ Scarlet Fever ...	37	63	6	1	107
„ „ Diphtheria ...	10				10
„ „ Enteric Fever ...					
No. of deaths from Smallpox ...					
„ „ Scarlet Fever ...	1				1
„ „ Diphtheria ...	1				1
„ „ Enteric Fever ...					
No. of Patients in Hospital on January 1st, 1896 ...	3	18			21
No. of Patients in Hospital on December 31st, 1896 ...	9	4	3		16

As this table shows there have been 118 patients isolated in the course of the year, or 73 per cent. of all cases of those particular diseases which have occurred in the districts which maintain the Hospitals.

Of the 118 patients admitted 116 were discharged convalescent, and two proved fatal. In 1895 there were 109 patients admitted, and five deaths. The admissions for each month of the year were—

Jan.	Feb.	Mar.	Apl.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
10	9	19	3	10	10	6	11	4	8	15	13

Generally speaking the scarlet fever under treatment was of a mild, uncomplicated type, but from time to time individual cases were admitted which were of a severe nature, requiring constant and anxious attention.

Ten cases of diphtheria were admitted in the year. In only one case was treatment by the use of Antitoxine injections carried out, and the result was most satisfactory. No tracheotomy was performed on any case admitted. Antitoxine and the appliances for its use can be obtained from the hospital by any medical gentleman in the district desiring to employ this treatment at the home of a patient, and when the nature of the disease requires confirmation the apparatus used at the hospital for taking "swabbings" from the throat is available on application.

ENTERIC FEVER. No enteric fever has been isolated at the hospital in 1896.

One case of smallpox was treated at Bellevue Hospital in the year, and being a mild case was discharged three weeks after admission. I have only to repeat what I have said in my report for 1895 as to the satisfaction given by the corrugated iron hospital for smallpox. It is always free from damp, and can be made ready for occupation at a few hours' notice. And whereas before its erection the greatest difficulty was found in obtaining the services of anyone to take charge of a smallpox patient, and very unsatisfactory results were the rule in the nursing and attendance, it is now possible to have a proper nurse and a general servant installed in charge without the slightest delay. So far no difficulty has been found in inducing members of the Joint Hospitals' staff to take temporary duty there, care being always taken that vaccination is performed prior to their removal to Bellevue. In the course of the year the work carried out at this hospital in laying down turf and making a good entrance road has vastly improved the appearance of it, and made it a most satisfactory isolation hospital for smallpox.

As regards the administration and the character of the nursing as carried out in the year I have to express my satisfaction, and in this my medical colleagues will, I think, bear me out. I have reason to think that the

institution is well thought of among those whose children have been isolated there, and I rarely find that any demur is made to my ordering the removal of any child to hospital. And that this is so is largely due to the fact that the public are satisfied that their children are well looked after by the matron and her subordinates.

The celerity with which in this neighbourhood the existence of "Notifiable Infectious Disease" is almost invariably reported to me, allows small opportunity for the physician in attendance on the case to verify his diagnosis with absolute certainty, and in consequence of this a case of measles was sent into hospital, the characteristic rash of that disease only being manifest after admission to the wards. As a result several convalescents and the matron developed measles shortly afterwards. In small hospitals, such as the Stratford-on-Avon Infectious Hospital, where there is no resident house-physician, accidents of this nature could be obviated by a small receiving ward being constructed when the hospital was built as an annex to the scarlet fever ward block, but cut off from it by a short passage with cross ventilation. In this receiving ward new patients would be admitted, and retained until seen by the doctor in charge of the hospital at his next visit. After inspection the case could be wheeled into the general ward. Such an arrangement would be especially valuable if, during an epidemic of scarlet fever, the complication of diphtheric sore throat was found to be prevalent, as it is not advisable to subject mild uncomplicated cases of scarlet fever to the close proximity of cases of the same disease complicated with severe throat trouble.

The staff of the hospitals now consists of the matron, one nurse, one ward-maid, a general servant, and a porter. The laundry work is done by the porter's wife. This staff is competent for the nursing of scarlet fever, and outside assistance is obtained whenever cases of other infectious diseases are admitted.

The removal of patients and of infected bedding, &c., from an area extending over 100 square miles is necessarily an expensive item of the cost of maintaining the hospitals, and the only available method of lessening this expense would appear to be to have one vehicle capable of doing all removal in a single journey. The quantity of goods to be removed from a cottage is often small in amount, and of a weight which would make little difference.

It has been suggested by the Medical Officer of Health for the Brilles Rural District that possibly the portion of the district which adjoins the Stratford district might utilise the Stratford Joint Hospitals for isolation purposes if an agreement could be entered into between the parties concerned. Under ordinary circumstances there is sufficient accommodation to allow of this for the isolation of scarlet fever, and cases of smallpox could

always be accommodated. And since we are always liable to have infection imported from non-isolated cases in this adjoining district the subject is worthy of attention. From Ettington, for instance, in the past fifteen months numbers of children were removed to hospital suffering from scarlet fever, while close to Ettington are several villages just outside the Stratford district where any cases that occurred were left at home. A temporary arrangement might be made for twelve months to determine the suitability of the plan.

The hospital has at present no means of summoning medical assistance after 6 p.m., as the porter is non-resident, and has his home in the town. Such an arrangement might, in an emergency, be a serious disadvantage. When there is reason to think the porter may be required at night he remains at the hospital, but it is, of course, impossible to always prepare for an emergency by taking this precaution.

I am, Gentlemen,

Your obedient servant,

ARTHUR THOMSON,

Medical Superintendent,

